

Oliver Lee Memorial State Park
Management and Development Plan

Director's Approval _____ **Date** _____

Oliver Lee Memorial State Park
Management and Development Plan

SECRETARY'S Approval _____ **Date** _____

Oliver Lee Memorial State Park

TABLE OF CONTENTS

PREFACE.....	5
I. EXECUTIVE SUMMARY	6
A. INTRODUCTION.....	6
B. SUMMARY of PROPOSED ACTIONS and POLICIES	6
1. PROPOSED ACTIONS.....	6
2. POLICY DIRECTIVES	13
II. PARK DESCRIPTION	13
A. BACKGROUND	13
B. KEY FEATURES.....	13
III. VISITATION and REVENUE.....	14
A. VISITATION.....	14
B. REVENUE	15
IV. EXISTING OPERATIONS/FACILITIES and PROPOSED ACTIONS	15
A. OPERATIONS and MANAGEMENT	15
B. NATURAL RESOURCES	18
C. CULTURAL RESOURCES.....	21
D. EDUCATION and INTERPRETATION	22
E. FACILITIES/STRUCTURES	23
F. EQUIPMENT	27
G. TRANSPORTATION and ACCESS.....	28
H. UTILITIES	29
V. BUDGET and STAFFING	31
A. CURRENT BUDGET	31
B. STAFFING	32

APPENDICES

- A. Maps of Region and OLMSP**
- B. Legal Description**
- C. Staffing/OLMSP Organization Chart**
- D. Facilities List**
- E. Equipment List**
- F. Cultural Resource Protection Laws**
- G. Current Park Brochure**

PREFACE

Each state park administered and managed by the State Parks Division (SPD) of the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) is required to establish a Management and Development Plan (Plan). {Reference: Title 19 Chapter 5, Part 3 of the New Mexico Administrative Code: 19NMAC 5.3.} The objective of these plans is to provide direction for the management and development of the state parks in a manner that enhances recreational opportunities, protects park resources, provides for public input and protects the natural environment. In essence, each plan will identify an overall management philosophy and then outline a specific strategy for achieving management goals at the park during a five-year period. {Reference: Section 13 of the State Parks Division's State Parks Policy and Procedures Manual}.

The planning process consists of: establishing a planning team for each state park; conducting an on-site inspection/assessment of the park, its resources and facilities; analyzing all information compiled on the park; proposing goals and related activities to be completed over the next five years; developing a Plan for the park; soliciting public input on the draft Plan and revising it as appropriate; approval of the revised Plan by the SPD Director; and implementation of the approved Plan by the Park Manager/Superintendent.

Any and all comments or recommendations concerning the Oliver Lee Memorial State Park (OLMSP) Management and Development Plan should be directed to:

Steve Tafoya
Park Manager
409 Dog Canyon Road
Alamogordo, NM 88310

Phone: (505) 437-8284
Fax: (505) 439-1290
E-mail: stafoya@state.nm.us

I. EXECUTIVE SUMMARY

A. INTRODUCTION

The mission of the SPD is to manage the State Park system to enrich the lives of New Mexicans and visitors to the state. At OLMSP, this mission is fulfilled by providing an appealing setting for outdoor recreation, including hiking, camping, wildlife viewing and other land-based forms of recreation. The overall goal is to continue offering a variety of high quality services in a safe and efficient manner, while making improvements to enhance the recreational experience of visitors, preserving the natural and cultural resources and improving and maintaining the park's assets.

This Plan sets forth the specific goals, policies, improvements and changes the park proposes to implement between Fiscal Year (FY) 2001 and FY 2005 (July 1, 2000-June 30, 2005).

B. SUMMARY of PROPOSED ACTIONS and POLICIES

The purpose of this Plan is to establish the overall direction of visitor and resource management at OLMSP. The Plan should be used as the basis for ongoing day-to-day management decisions and actions, as well as for long-term capital improvements. The Plan translates agency policy into courses of action necessary for achieving and maintaining the desired resource conditions and program direction at OLMSP. It is intended to be a working document for continuous use and revision by the park's staff.

The proposed actions of the OLMSP Plan will help make the park a more attractive, functional, and diverse recreational destination for visitors. The natural and cultural resources, which draw visitors to the park, will be better protected and interpreted. The park will also be more efficiently managed and maintained by park personnel. The actions highlighted in this plan fall into four major categories:

1. PROPOSED ACTIONS

Tables 1-5 provide a detailed list of proposed actions for the FY01-FY05 planning period. The park has set forth four major goals and multiple tasks to achieve each of them. These strategies are grouped by objective and priorities are identified for each fiscal year.

An estimate of the financial and human resources required for each task and a time frame for implementing them are also listed. In FY01, the plan calls for an expenditure of \$113,500. The tables identify expenditures for FY02 (\$405,000), FY03 (\$62,500), FY04 (\$4,000) and FY05 (\$15,000). These funds have not yet been appropriated by the Legislature, but this Plan will be used to advocate for the projects identified. There are several possible funding pools listed in the last column of each table that could be used to accomplish these projects.

The major goals are to complete projects that create public safety and provide for ADA compliance, enhance resource protection, develop and maintain facilities and to provide education and interpretive exhibits and programs.

Oliver Lee Memorial State Park

Table One
Fiscal Year 01

Goal	Priority	Task	Time Frame (FY)	Estimated Cost (\$)	Funding Source	Page #
1.Public Safety/ADA	4	Install one information board	01	1,000	CIP	16
	5	Install new, uniform park sign system	01	500	AOB	26
2.Resource Protection	1	Stabilize ranch house	01	50,000	CIP/HPG	23
	2	Install ranch house rodent, bird and bat control	01	1,000	CIP HPG	23
3.Develop/Maintain Facilities	3	Build group shelter, tent area with vault toilet	01	40,000	OG AOB CIP	25
4.Education/ Interpretation	6	Visitor Center exhibit upgrade	01	19,000	CIP	23
	7	Interpretive Master Plan	01	In house	AOB	23
	8	Compile a herbarium of plants within the park	01	2,000	CIP OG	20

Total FY proposed expenditures \$113,500

FUNDING: **AOB** (Annual Operating Budget, Parks Division), **CIP** (Capital Improvements Program, Parks Division), **HPG** (N.M. Historic Preservation Division, National Science Foundation, Getty Foundation), **TRAILS** (Federal Highway Administration Funds, Land & Water Conservation Fund), **YCC** (Youth Conservation Corps program), **OG** (Other grants or outside agency funds).

Oliver Lee Memorial State Park

Table Two
Fiscal Year 02

Goal	□ Priority	□ Task	Time Frame (FY)	Estimated Cost	Funding Source	Page #
1. Public Safety/ADA	6	Make parking and walks at vault toilet ADA compliant	02	1,000	CIP	25
	7	Make site # 36 an ADA compliant campsite	02	1,000	CIP	25
2. Resource Protection	1	Shelter over barn	02	50,000	CIP/HPG	24
3. Develop/Maintain Facilities	3	Replace electrical mains in park with conduit lines and additional electrical and water hook-ups at sites 11-19	02	75,000	CIP	30
	8	Install 10 additional shelters of modified design	02	200,000	CIP	25
	5	Resurface all roads including maintenance yard	02	50,000	CIP	28
	4	Install water main cut-off, valves and drains	02	3,000	CIP	29
4. Education / Interpretation	2	Ranch house living history interpretation w/new exhibits	02	25,000	CIP/HPG	24

Total FY proposed expenditures

\$405,000

FUNDING: **AOB** (Annual Operating Budget, Parks Division), **CIP** (Capital Improvements Program, Parks Division), **HPG** (N.M. Historic Preservation Division, National Science Foundation, Getty Foundation), **TRAILS** (Federal Highway Administration Funds, Land & Water Conservation Fund), **YCC** (Youth Conservation Corps program), **OG** (Other grants or outside agency funds).

Oliver Lee Memorial State Park

**Table Three
Fiscal Year 03**

Goal	□ Priority	□ Task	Time Frame (FY)	Estimated Cost (\$)	Funding Source	Page #
1.Public Safety/ADA	5	Provide phone service to the park residence	03	20,000	CIP	27
3.Develop/Maintain Facilities	1	Re-roof visitors center	03	10,000	CIP	26
	2	Install vault toilet at Ranch House parking lot	03	25,000	CIP	25
	3	Modify dump station for two way use	03	2,500	CIP	28
	4	Install entrance gate bypass, cattle guard, tire-ripper and walk through at park entrance	03	5,000	CIP	28

Total FY proposed expenditures

\$62,500

FUNDING: AOB (Annual Operating Budget, Parks Division), CIP (Capital Improvements Program, Parks Division), HPG (N.M. Historic Preservation Division, National Science Foundation, Getty Foundation), TRAILS (Federal Highway Administration Funds, Land & Water Conservation Fund), YCC (Youth Conservation Corps program), OG (Other grants or outside agency funds).

Oliver Lee Memorial State Park

**Table Four
Fiscal Year 04**

Goal	Priority	Task	Time Frame (FY)	Estimated Cost (\$)	Funding Source	Page #
4. Education and Interpretation	1	Purchase a 32 inch video monitor or video projector for Visitor Center	04	4,000	CIP AOB OG	27

Total FY proposed expenditures

\$4,000

FUNDING: AOB (Annual Operating Budget, Parks Division), CIP (Capital Improvements Program, Parks Division), HPG (N.M. Historic Preservation Division, National Science Foundation, Getty Foundation), TRAILS (Federal Highway Administration Funds, Land & Water Conservation Fund), YCC (Youth Conservation Corps program), OG (Other grants or outside agency funds).

Oliver Lee Memorial State Park

Table Five

Fiscal Year 05

Goal	Priority	Task	Time Frame (FY)	Estimated Cost (\$)*	Funding Source**	Page #
3.Develop/Maintain Facilities	1	Create connecting trails between main park and the Dog Canyon Tract	05	10,000	Trails/OG	29
	2	Level the camp sites	05	5,000	CIP	25

Total FY proposed expenditures

\$15,000

FUNDING: **AOB** (Annual Operating Budget, Parks Division), **CIP** (Capital Improvements Program, Parks Division), **HPG** (N.M. Historic Preservation Division, National Science Foundation, Getty Foundation), **TRAILS** (Federal Highway Administration Funds, Land & Water Conservation Fund), **YCC** (Youth Conservation Corps program), **OG** (Other grants or outside agency funds).

2. POLICY DIRECTIVES

- Improve overall aesthetic quality of the park.
- Provide a variety of recreational, interpretive and educational opportunities that will enhance visitor experience.
- Develop and improve facilities to better serve our visitors.
- Establish and monitor a visitor use policy for various areas within the park that will provide a variety of recreational opportunities and still protect the park's natural and cultural resources.

II. PARK DESCRIPTION

A. BACKGROUND

Governor Arthur Seligman created the New Mexico State Park Commission August 31, 1933. The Commission was formed to provide a directing body to take advantage of the United States Government's State Park Emergency Conservation Work. House Bill 32 was approved on February 21, 1935, an act which created the State Park Commission. In the Laws of 1977, Chapter 91, page 274, the Legislature set aside money for the creation of Oliver Lee Memorial State Park, on 200 acres of land at the mouth of Dog Canyon, approximately 17 miles southeast of Alamogordo. The Legislature appropriated \$955,000.00 for the project. Construction began on January 25, 1979 and was completed in 1980. The park was officially dedicated on May 29, 1980.

In 1983 the New Mexico State Park and Recreation Division entered into an agreement with the National Park Service (NPS) to manage the 440-acre Dog Canyon Tract, approximately one mile south of the State Park. The tract contained the Oliver Lee Ranch House ruins and associated grounds. The agreement provided for a thirty-year period for an exchange of New Mexico State owned lands within the revised boundary of White Sands National Monument for the tract. Although a land exchange never took place, ownership of the Dog Canyon Tract was transferred to the SPD in December 1998.

OLMSP is contained on two separate properties totaling 640 acres.

B. KEY FEATURES

The primary attractions at OLMSP are its campground, visitor center, trails, the Oliver Lee Ranch House and the beautiful riparian setting of Dog Canyon. This combination of features makes possible a variety of activities visitors may enjoy year-round. The mild fall and winter temperatures of the upper Chihuahuan Desert also provide for outdoor activity during what is normally the off-season for most parks.

OLMSP is a popular place for viewing wildlife. Bird watching, in particular, is an activity enjoyed by many. The combination of riparian and desert environments provides for a varied and interesting mix of botanical resources that are found in the park. The identification of native plant species is an activity that seems to be gaining popularity among visitors. These activities can be enjoyed on the park's three trails: The Dog Canyon Recreation Trail, Interpretive Trail and Ranch House Grounds Interpretive Trail.

The area surrounding Dog Canyon is rich in cultural history. Archaeological remains of the Jornada-Mogollon culture indicate human occupation of the area as far back as 700 to 1,000 years ago. The next group of inhabitants was the Apache, who arrived in the area around 500 years ago. The Apache used the steep cliffs of Dog Canyon as a fortress. On several occasions in the 1800's, the Apache escaped pursuits of the U. S. Army by disappearing into the canyon. In the 1880's, the next wave of settlers arrived, primarily Euro-Americans. Francois Jean "Frenchy" Rochas and Oliver Lee arrived to take advantage of the constant supply of water in Dog Canyon. The long and colorful human history of the area is illustrated with evidence left by early native peoples found near structures left by settlers of the late 19th century American West.

Many of the facilities at OLMSP have been recently renovated. The park's restrooms and parking areas are compliant with the Americans With Disabilities Act (ADA). The park's trails have undergone recent improvements, and work projects on them are in progress. Campground shelter renovations, recently painted trim on buildings and various other improvements help make OLMSP an appealing and enjoyable destination for the camper and day user alike. A detailed description of the park and its facilities are contained in Appendices A, C and G.

Other attractions in the area include White Sands National Monument, the Space Center and International Space Hall of Fame and the Lincoln National Forest. A map of the region is included in Appendix A.

III. VISITATION and REVENUE

A. VISITATION

OLMSP receives the most visitation in the late winter and spring months - February through April, as well as late summer and fall - September through November, with a sharp drop off in the summer months - June to August. This pattern of use is attributed to the mild temperatures of the fall and winter seasons. There is also a seasonal migration pattern of full time Recreation Vehiclcers (RV) from summer to winter camping locations, and vice versa. Easter Sunday is the single busiest day of the year.

A survey of visitors is needed to accurately determine visitor use trends, patterns and interests. The following is based on staff observation and fee payment receipts. Most visitors are from out of state. They are traveling cross-country and visiting southwestern states and National Parks. Many

of these visitors are from other countries, mostly European. Visitation is expected to increase steadily in the future.

**TABLE 6
ANNUAL VISITATION AND RECEIPTS**

Fiscal Year	Visitation	Self-Generated Receipts
99	45,140	\$53,296
98	48,595	\$53,312
97	51,537	\$56,728
96	35,953	\$51,347
95	23,085	\$56,673
Average	40,862	\$54,271

B. REVENUE

As indicated in Table 6 above, OLMSP generates an average of \$54,271 annually through self-generated receipts collected from day use and overnight camping. There are no other sources of revenue at the park. Fees collected for the issuing of special use permits are minimal. The planned addition of a group shelter and tent camping area may result in increased revenues.

IV. EXISTING OPERATIONS/FACILITIES and PROPOSED ACTIONS

The following section provides a brief summary of all aspects of the park. Details are provided on any proposed actions or changes in management policies for the plan period.

A. OPERATIONS and MANAGEMENT

Lands/Realty. PD owns the entire 640 acres comprising OLMSP. However, the park is contained on two separate properties. The original 200-acre portion of the park is located at the mouth of Dog Canyon and contains the park office/visitor center, shop and maintenance yard, campground, Interpretive Trail and Dog Canyon Recreation Trail trailhead. The 440-acre Dog Canyon Tract is located approximately one mile south of the main area. Ownership of the tract was transferred from NPS to SPD in 1998. See maps in Appendix A and Legal Description in Appendix B.

In 1999 a land survey of the Dog Canyon Tract revealed that two buildings and ranching materials, belonging to Sam Fairchild, the park’s neighbor to the south, were encroaching upon park property. SPD and Mr. Fairchild agreed that a land exchange between the two parties was the proper solution to rectify the situation. A lease agreement was implemented providing for continued occupation and use by Mr. Fairchild of 19.7 acres of land owned by SPD, that surrounds the encroachment and is located near the southwest corner of the Dog Canyon Tract. The lease also allowed SPD to fence and manage 19.7 acres of Mr. Fairchild’s land located at the southeast

corner of the tract. The lease states that this arrangement is in effect pending approval of the land exchange by the Legislature.

Lands adjacent to and near the park are privately owned or belong to various government agencies such as the U.S. Forest Service (USFS), U.S. Bureau of Land Management (BLM), U.S. Air Force (USAF) and the New Mexico State Land Office (NMSLO). Dialogue with representatives of these landholders is necessary to insure against land uses or developments that would harm the natural or cultural landscapes and environment, or otherwise adversely affect the overall recreational experience of visitors to OLMSP. SPD may find that the purchase, transfer or lease (viewshed leases at minimum) of certain lands is necessary to preserve these important park elements.

Hours of Operation. The gate to the park entrance is open 7 a.m. to 9 p.m. daily. The office/shop is generally open from 8 a.m. to 5 p.m. daily. The visitor center is generally open daily from 9 a.m. to 4 p.m. Closures for holidays or other reasons are posted in advance, if possible, to minimize inconveniences to visitors.

Maintenance. OLMSP staff uses the Division's Standards of Care manual as the guideline for proper maintenance of park facilities, which are maintained in a safe and attractive condition for visitor and staff use. Additional maintenance guidance is provided in the Division's Policies and Procedures Manual, Section 11.

Emergencies. Park emergencies are handled in accordance with the Division Policies and Procedures Manual, Section 5 and other Division Directives. In the event of an emergency on the Dog Canyon Recreation Trail such as injury or missing persons, the Otero County Sheriff's Department is contacted to dispatch Emergency Medical Service (EMS) and/or State Police Search and Rescue, as appropriate to the situation. Park staff must render assistance to those that require it within the park boundaries. The Division's Policies and Procedures Manual should be consulted for clarification of responsibilities to persons requiring assistance outside the park boundaries. Park facilities are made available to other agencies or organizations in support of their rescue efforts on the trail. A new bulletin board for posting public safety and other information to visitors is needed and targeted for FY01. It will be purchased with CIP funds and cost \$1,000.

Regional Support Services. The regional office is located at Cottonwood and the Regional Manager and staff provides operational and administrative assistance. An Administrator 2 and Plant Operations Specialist support the parks.

The regional warehouse stocks park supplies for distribution to parks within the region. Some supplies are purchased in bulk and distributed. In addition, specialized tools and equipment are maintained at the warehouse and are available for use by the parks.

Rules and Policies. OLMSP staff follows the standard Division, Department and State policies for operational guidance. These include the EMNRD Policies and Procedures Manual, State Parks Division Policies and Procedures Manual, Division Standards of Care Manual, the

Administrative Service Division's Procedures Handbook, State Personnel Office Rules and Regulations and other applicable policy and procedure guides. Policy books are accessible and kept up to date, and new employees are required to read and sign them.

B. NATURAL RESOURCES

Oliver Lee Memorial State Park is at 4,400 feet elevation. The park is located in Otero County in south central New Mexico on the eastern side of the Tularosa Basin in the northern reaches of the Chihuahuan Desert. The park is at the base of the western escarpment of the Sacramento Mountains, at the mouth of Dog Canyon, which contains a perennial stream. The park includes dramatic geologic features and hosts a wide variety of plant and animal species indigenous to the Chihuahuan Desert and Sacramento Mountains.

Geological Resources. Dog Canyon is one of several large erosional canyons on the west side of the Sacramento Mountain escarpment. The deep canyon and steep cliff faces of the escarpment expose the geologic history of the region from lower Ordovician times (ca. 570 million years ago) to Permian times (ca. 300 million years ago). This sequence of rocks is nearly one mile thick and records marine sedimentary environments alternating with episodes of terrestrial erosion. Sedimentary rocks created in shallow marine environments include limestone, dolomite (magnesium-rich limestone), sandstone and occasional thin shales. These rocks are gray to brown in color and some contain rare fossils such as nautiloid cephalopods. Weathering of limestone and dolomites has produced chert nodules that were used by Native Americans to make stone tools. Rocks of Mississippian age (ca. 340 million years old) represent continental shelf deposits including reef-like biohermal mounds - thick accumulations of fossil crinoids, bryozoans and dense limestone. These can be seen from the Dog Canyon Trail.

During the Tertiary Period (ca. 30 million years ago) the northern Sacramentos experienced significant volcanism. These forces intruded two igneous sills into the Devonian (ca. 380 million years old) sedimentary rocks. These sills are green with dark inclusions, like mint-chocolate-chip ice cream, and crop out along the Dog Canyon Trail. Boulders and cobbles eroded from these sills can be found on the canyon bottom.

OLMSP lies on the edge of the Tularosa Basin, a closed basin of the Rio Grande rift, which covers approximately 6,500 square miles. Basin and range faulting began about 25 million years ago and resulted in uplift of the mountains that border the Basin: the San Andres, Organ and Franklin Mountains to the west and the Sacramento Mountains and Sierra Blanca to the east. The same rocks visible in the Sacramento Mountains escarpment can be found beneath the Tularosa basin, but they are now buried by thousands of feet of material eroded from the surrounding uplands. This basin fill material is interbedded sand, silt, clay and evaporites that form the middle Miocene to middle Pleistocene Santa Fe Group (ca. 1 to 30 million years old).

Earth material eroded from the steep mountain front during intense rainstorms and rapid snowmelt deepen and cut into the canyons, such as Dog Canyon, and form the Quaternary (ca. 1 million years old) alluvial fan deposits that are draped like aprons along the base of the escarpment. During the late Pleistocene (ca. 1 million to 10,000 years ago), Lake Otero occupied much of the Tularosa Basin. OLMSP lies on the eastern shoreline. Lake Otero grew from runoff and snowmelt that were much more abundant during the moist, cool, pluvial climate that prevailed. As the climate warmed and dried about 20,000 years ago, Lake Otero began to dry up

and shrink. Remnants of Lake Otero are present today in the much smaller Lake Lucero, Alkali Flat playa and the vast fields of gypsum dunes that make up White Sands National Monument.

Water Resources. The presence of water and the shelter of the canyon walls create a unique riparian environment that the park staff's mission is to protect. The perennial stream is sustained by rain and snow-melt that make their way through cracks, fractures and bedding planes in the mountains and emerge as seeps and springs from the various limestone formations of the canyon.

The stream in Dog Canyon flows perennially in the Lincoln National Forest for approximately 0.25 miles, then enters the park and continues for another approximately 0.25 miles. It dries out and goes underground before reaching the west boundary of the park. White and gray travertine coats the canyon walls in places. It was formed by underground dissolution of the limestone and dolomites followed by precipitation of calcium carbonate when flowing water reached at the land surface. Although the stream appears to remain relatively constant, the length and volume of water flow vary slightly from time to time. The volume of flow has never been measured and water quality has never been tested. The stream supports a limited variety of insects and amphibians, but no fish. Streamside access to Dog Canyon is restricted from the boardwalk up to the USFS boundary. Permission to enter must be granted by the park manager and a member of the park staff must accompany visitors. Entry into this fragile riparian zone is closely monitored to prevent any negative visitor impacts.

Vegetation/Landscaping. Native vegetation in the park is typical of the Upper Sonoran Life Zone. Trees commonly found in the park and throughout much of the Chihuahuan Desert are desert willow (*Chilopsis linearis*), netleaf hackberry (*Celtis reticulata*) and one-seed juniper (*Juniperus monosperma*). Other trees found in the riparian zone of Dog Canyon are velvet ash (*Fraxinus velutina*), Rio Grande cottonwood (*Populus deltoides wislizenii*) and New Mexico locust (*Robinia neomexicana*). Little-leaf sumac (*Rhus microphylla*), Apache plume (*Fallugia paradoxa*), creasote bush (*Larrea tridentata*), four-wing saltbush (*Atriplex canescens*), ocotillo (*Fouquieria splendens*) and allthorn (*Koeberlinia spinosa*) are some of the more common shrubs of OLMSP. Mormon tea (*Ephedra trifurca*) is among many woody herbs living in the park. Vines like wild grape (*Vitis arizonica*) and poison ivy (*Toxicodendron rydbergii*) prefer the cooler, wetter area of Dog Canyon. The great variety of cacti species thriving throughout the park are a significant attraction to people and wildlife. Strawberry hedgehog (*Echinocereus fendleri*), claret cup (*Echinocereus triglochidiatus*), cane cholla (*Opuntia imbricata*) and varieties of prickly pear (*Opuntia* spp.) are widely distributed. Wheeler sotol (*Dasyilirion wheeleri*), Torrey yucca (*Yucca torreyi*), soaptree yucca (*Yucca elata*) and New Mexico agave (*Agave neomexicana*) are some of the resident desert lillies. Some herbaceous annuals and perennials of the park are Indian paintbrush (*Castilleja integra*), jimsonweed (*Datura* sp.), aster (*Aster* sp.), alamo penstemon (*Penstemon alamosensis*), helleborine orchid (*Epipactis gigantea*) and Wright's verbena (*Verbena wrightii*). Common grasses found in the park are sideoats grama (*Bouteloua curtipendula*), black grama (*Bouteloua eriopoda*) and Indian ricegrass (*Oryzopsis hymenoides*). Species sustained by the constant flow of the Dog Canyon stream include cattail (*Typha angustifolia*), maidenhair fern (*Adiantum capillus*) and rough horsetail (*Equisetum hyemale*).

The park staff has produced and updates a Botanical Resources List for use by park visitors and a resource inventory for managing these resources. A herbarium for the unique and varied plant communities within the park would serve as an excellent educational tool and assist the park staff

in managing these natural resources. The Native Plant Society of New Mexico has expressed interest in organizing, collecting and curating the herbarium for the park. Completion of this herbarium is scheduled for FY01 and will cost \$2,000 from OG and CIP budgets.

Most of the existing vegetation and landscaping in the park requires very little care, with the exception of watering shade trees and unobtrusive viewsheds. Future landscape work should utilize native and xeric plants to minimize water use and maintenance. Additional landscaping is needed at the Visitor Center entrance, comfort station and vault toilet. A new landscape is being planned for the ranch house grounds. The water consumptive lawn there has been abandoned. A xeric landscape, which includes the expansion of the orchard and larger trees to create a viewshed in front of the manager's residence, has begun. This expansion will also employ the xeric concept, use native plants as much as practicable and consider the viewshed.

Wildlife. OLMSP is richly populated with a diversity of mammal species typical of the upper Chihuahuan Desert environment. Due to the unique riparian zone of Dog Canyon and the expanse of relatively undisturbed lands in the surrounding area, an abundance of wildlife is able to thrive in and around the park. Mule deer (*Odocoileus hemionus*), javelina (*Pecari tajacu*), ground squirrel, black-tailed jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus floridanus*), and numerous rodent species sustain predators such as mountain lion (*Felis concolor*), bobcat (*Lynx rufus*), black bear (*Euarctos americanus*), coyote (*Canis latrans*) and gray fox (*Urocyon cinereoargenteus*). Raccoon (*Procyon lotor*), coatimundi (*Nasua narica*), ringtail (*Bassariscus astutus*), porcupine (*Erethizon dorsatum*), badger (*Taxidea taxus*) and several species of bats and skunks also share the desert habitat.

Interesting reptiles and amphibians inhabit the area. The two species of rattlesnake found in the park are the western diamondback (*Crotalus atrox*) and the blacktail (*Crotalus molossus*). Visitors and staff see them almost daily during summer months. No one has ever been bitten by a rattlesnake at OLMSP, partly due to educational efforts by park staff through postings and interpretive programs. Interpretive signs about the presence, habits and dangers of rattlesnakes were added to the interpretive trail in 1999. The park is home to several turtles, geckos, lizards, skinks, and whiptails, non-venomous snakes and, more notably, the Texas horned lizard (*Phrynosoma cornutum*). This lizard has been severely impacted in Texas and Oklahoma by pesticides, loss of habitat, and commercial collection by humans. All horned lizards have been granted legal protection in New Mexico and are commonly seen in OLMSP. Amphibians known to live in and around the park are the barred tiger salamander (*Ambystoma tigrinum*) and three spadefoot toads: New Mexico spadefoot (*Spea multiplicata*), plains spadefoot (*Spea bombifrons*) and Couch's spadefoot (*Scaphiopus couchii*).

Desert and riparian environments of OLMSP draw a great number of bird species and, thus, an increasing numbers of birdwatchers. Diverse species of migratory and resident species are commonly seen throughout the area. Although too numerous to list here, some of the more common birds of the park are turkey vulture (*Cathartes aura*), redtailed hawk (*Buteo jamaicensis*), northern harrier (*Circus sp*), merlin (*Falco columbarius*), Gambel's quail (*Lophortyx gambelii*), mourning dove (*Zenaidura macroura*), roadrunner (*Geococcyx californianus*), five species of hummingbird, northern flicker (*Colaptes sp*), ladder-backed woodpecker (*Dendrocopos scalaris*), nine species of warbler and cactus wren (*Campylorhynchus*

brunneicapillum). Park staff uses in-house lists of amphibians, reptiles, mammals and birds found in the park to educate and entertain visitors. These lists also are vital management tools as they provide an updateable inventory of species that aids monitoring environmental conditions at the park. The park's precious wildlife resources are protected by enforcement of state laws and SPD regulations and by environmental education and interpretation. These methods are adequate for the present, as the park appears to be environmentally healthy, evidenced by the diversity and quantity of wildlife species. Wildlife is effectively managed by the park's fenced boundaries. Fencing restricts unauthorized entry and limits any negative impacts created by livestock. Park management remains dedicated to the well being and preservation of wildlife and accepts the assistance of other agencies and organizations when appropriate.

C. CULTURAL RESOURCES

Cultural Resource Management. Cultural resources within the park boundaries are subject to state cultural resource protection laws (See Appendix E). To avoid impact to significant cultural resources, development within the park will be coordinated with SPD's Cultural Resources Planner. Park personnel will work to preserve and protect cultural resources from impacts of the public or environmental factors.

Cultural Resource Inventory - A majority of the OLMSP property has been archaeologically surveyed and inventoried during the past 25 years. The entire northern tract was surveyed in 1977 by Human Systems Research, Inc. and archaeological excavation and testing was carried out during that time. The tract is being re-surveyed by SPD to determine clear activity areas of past cultures. In both 1973 and 1998, the southern tract of OLMSP was archaeologically surveyed and inventoried.

Archaeology. The existence of a perennial flowing stream in Dog Canyon made this canyon very important to native peoples as they traveled and lived in the Tularosa Basin. The earliest potential occupants in this area were Paleoindian (9,500-5,500 B.C.) who hunted now-extinct big game such as mammoth (*Mammothus* sp.) and bison (*Bison antiquus*). Fluted projectile points and campsites characterize Paleoindian sites. The Archaic period (5,500 B.C.-A.D. 200) included a broader spectrum of subsistence strategies with both hunting and gathering. Archaic sites are represented by characteristic projectile points, as well as remnants of plant processing.

During the Formative period (A.D. 200-1400), the Jornada Mogollon peoples inhabited the Tularosa Basin. The Jornada Mogollon were sedentary, living in villages and practicing dry-land and flood-land agriculture. Artifacts from the period include projectile points, ground stone and ceramics, and features consist of pithouses, diagnostic hearths, rock pueblo ruins, as well as rock art.

By the 1400s, the Mescalero Apache was the only Native American group in the Tularosa Basin. The Mescalero were highly mobile, living in tipis, and hunting and gathering for subsistence. As a result, artifact assemblages have characteristic projectile points, as well as drills, spears and

stone axes. The territorial nature of the Apache caused the Spanish colonial groups and Anglo settlers of the period to minimally utilize the Tularosa Basin during the early historic period.

The Basin saw a great deal of activity from 1848 to 1912 when the U.S. military became more active and ranchers and homesteaders entered the area. Historic occurrences in the Dog Canyon area were documented 1849-1881, when the U.S. military and the Mescalero Apache had a number of confrontations within the canyon itself.

In 1885, Francois Jean (“Frenchy”) Rochas established a homestead at the mouth of Dog Canyon. Rochas ran cattle, planted an orchard and built extensive rock retaining walls up the ridges flanking the canyon. He lived at the site in a two-room rock and adobe cabin until he died in 1894. A partially reconstructed cabin is located on the interpretive trail west of the Visitor Center.

Oliver Milton Lee played a large part in the settlement of this area as well. He came to New Mexico from Buffalo Gap, Texas in 1884 and finally settled just south of Dog Canyon in 1893. His ranch encompassed 320 acres of land and consisted of a large adobe ranch house, barn, corrals, slaughterhouse, and reservoir. Lee developed a water system from Dog Canyon to the ranch, the remnants of which still remains and has been interpreted.

Lee was a very well known rancher and was influential in the formation of the town of Alamogordo through his connections with the Eddy brothers of El Paso. The railroad came to this area in 1898 and Alamogordo was established that same year.

Lee sold his Dog Canyon property in 1907 and after a series of owners, what is now the southern tract of OLMSP was acquired by White Sands National Monument, National Park Service in 1939. The Park Service transferred the 440 acres to SPD in 1998. The property currently contains the remnants of the Oliver Lee ranch, including many archaeological features and an interpretive trail.

Historic Structures. The Oliver Lee Ranch House is the only historic building at OLMSP. This house was partially reconstructed in 1984, as the roof and several walls had fallen in. The reconstruction was based on archival and oral histories as well as archaeological excavations undertaken at that time.

D. EDUCATION AND INTERPRETATION

The natural setting, history and location of OLMSP provide for extensive potential educational and interpretive opportunities. Due to a small staff, inadequate exhibits and equipment and a volunteer program still in infancy, interpretive and educational programs at the park are at present, limited. All park staff are required to provide various interpretive services to our visitors.

Staff who are familiar with the riparian environment of Dog Canyon conduct guided walks in the restricted area above the boardwalk. Personnel that work in the visitor center should be knowledgeable about the facilities and have some familiarity with the history of the park and surroundings. An internal program of ongoing interpretive training for all OLMSP staff would be helpful in providing top quality service to visitors.

Cultural and natural resource surveys and inventories are substantially completed at OLMSP. This information will be used to compile a comprehensive Interpretive Master Plan (IMP), scheduled for FY01 and to be prepared by SPD staff. The IMP will help in making decisions about future interpretive programs and activities, historic structure stabilization, brochures and exhibit renovations.

Currently, OLMSP has two interpretive centers - one located in the Visitor Center and the other in the restored Oliver Lee Ranch House. The Visitor Center interpretive exhibits include four large murals depicting local history. Display cases below each mural contain interpretive panels and historic artifacts and objects. There are also flora and fauna displays and a geology exhibit relevant to Dog Canyon. These exhibits are approaching 20 years old and suffer from damage and poor curation. They will be upgraded and stabilized and historic artifacts will be curated in FY01 at a cost of \$19,000 from CIP funding.

The Visitor Center has a theater where slide shows and videos about the park are shown to visitors. The slides, video equipment and videos are outdated and in poor condition. All films and videos need to be copied to insure their preservation. A new and current collection of videos and slides about the park and new state-of-the-art video equipment are needed to take full advantage of our theater facility and to educate our visitors. The purchase of video equipment is estimated to cost \$4,000 in CIP, AOB or OG funds and is planned for FY04.

The Oliver Lee Ranch House provides historic ranching interpretation and contains archaeology exhibits and period furniture of the 1890's to the 1930's. Interpretive panels are located in the house and along the interpretive trail that leads to the outdoor historical features. The ranch house is in need of stabilization as the house lacks a foundation in some areas, causing settling. There are cracks in the walls and many of the items on display are not curated properly or are impacted by rodents, insects or environmental factors such as heat and sunlight. The ranch house will be stabilized and all floors sealed in FY01 at a cost of \$50,000 through CIP funding and possibly HPG funding. Measures will be taken to protect the building and exhibits from the damaging effects of bats, birds and rodents in FY01 and will cost \$1,000 in CIP and HPG funds.

Currently, the Oliver Lee Ranch House is viewed through guided tours and does not reflect a "living" house. It is proposed that interpretation of the Oliver Lee Ranch House be modified in FY02 to reflect a living history rather than an archaeology exhibit. This will provide a more comprehensive theme and new programming. It is recommended that the archaeology displays be moved to the current "ranch hand's quarters" at the house. The current furnishings will be evaluated as to their relevance to the living history and new furnishings and objects from the Oliver Lee time period (1890-1907) will be acquired, primarily through donation. This conversion will be completed through the IMP process by SPD staff as well as help from volunteers with experience in historical interpretation. As part of the IMP, a curation and donation plan will be developed to help in determining appropriate objects for display. A total of \$25,000 will be used in research and new signage, funded through HPG and possibly CIP.

The adobe walls of the barn at the Oliver Lee Ranch are in ruins and are continually being eroded. It is proposed that a shelter mirroring the historic roofline be constructed over the barn in FY02 at a cost of \$50,000 from CIP and HPG.

Another interpretive resource at OLMSP is the 0.6-mile long interpretive trail that begins at the Visitor Center and ascends up the mouth of Dog Canyon. Interpretive signs that highlight the plant life and historic features of the canyon are located at the glade picnic area and on the boardwalk. There are also panels on the prehistory of the area as well as the restored ruins of Frenchy's Cabin.

The OLMSP brochure produced by SPD contains sufficient information for the majority of visitors needs and interests. However, versions in Spanish and German would serve growing segments of park visitors. Supplements of the original are produced in the park, but the copy quality is mediocre at best. Print shop quality reproductions would be expensive and unaffordable. The Alamogordo City Promotions Board has twice produced rack card brochures of OLMSP at no cost to the park. A portion of city lodger's tax funds the Promotions Board. Botanical resource lists, reptile, amphibian and mammal lists, bird lists and trail maps are designed, produced and updated in-house. They are quite popular with visitors.

Park staff is considering a "Junior Ranger" type educational program that would be staffed by a student intern seasonal position. The funding source to cover the expense of this program has not yet been identified. The addition of children's interpretive exhibits would also increase the learning opportunities available to younger visitors. The cost of such exhibits would be included in the visitor center exhibit upgrades mentioned in the Education and Interpretation section of this Plan.

E. FACILITIES/STRUCTURES

Concessions. There are currently no concessions at the park. However, prospects for concessions in the future are possible.

Recreation. Appendix D identifies the recreational facilities in the park. For the most part, they are in good condition and, other than indicated below, will not be replaced or refurbished during the plan period.

The one campground at OLMSP has 44 campsites. Eighteen of the sites have electricity and water hookups. Site 24 is a designated campsite that has a shelter, electric outlet, water and sewer hookups. Site 26, adjacent to site 24 has been designated as an additional volunteer campsite and has the same facilities/hookups. Site 23 is the handicapped site, which offers the visitor a paved, level site with water and electricity as well as a handicapped accessible picnic table. Ten of the sites have unique shelters, which were renovated in 1998. All campground sites are developed and contain a picnic table, a pedestal grill or fire ring grill. Water is located nearby. The campground is currently served by a new vault toilet on camping loop B. The comfort station is centrally located between loops A and B and has showers. This facility recently underwent extensive renovation for ADA compliance. The comfort station contains the latest water and energy saving controls and fixtures. In addition, the comfort station is kept warm during the cold months with an energy-efficient, floor-installed radiant heating system.

Projects planned for the existing campground recreational facilities include adding 10 shelters of a modified design that will somewhat mimic the unusual existing shelter design. The shelters will cost \$200,000 in CIP funds and the additions are planned FY02. The extension of water and electric service hook-ups to sites 11-19 in loop "A" would provide visitors additional hook-up sites. The cost of these extensions is included in a related project in Section H. Site #36, which is next to the vault toilet, should be made ADA compliant. This site is ideal for that purpose as it is already connected to the vault toilet by an ADA concrete walk, and it would provide a non-hook-up camping opportunity for visitors with disabilities. This project is planned for FY02 and will be paid for with \$1,000 of CIP funds. Some campsites require leveling so that a greater variety of recreational vehicles can utilize them. FY05 is targeted for this improvement and it will cost \$5,000 in CIP funds.

The addition of a tent camping area and group shelter at a location north of the dump station is planned. Many tent campers visit OLMSP and usually set-up in the existing non-electric sites. Although in most cases these sites are adequate for tents, it can be difficult to drive stakes in the hard and rocky ground. A separate tent camping area, with prepared tenting "pads" and some of the amenities found in a developed site, would expand recreational opportunities available to the park visitor. The same could be said of a new group shelter, as the park does not currently have one. This new recreational area should have potable water and a vault toilet. The majority of this site was disturbed during the original construction of the park. The site chosen is connected to the Interpretive Trail; thereby, the visitor center, park office and Dog Canyon Recreation Trail are conveniently linked. As a preliminary, the only phase of this expansion requiring archaeological monitoring would be widening of the access road from near the dump station to the site. It is likely that much of the project costs may be funded by a Land and Water Conservation Fund grant (OG), and the remainder would be charged to the CIP and AOB budgets. The total cost of this project is \$40,000 and is planned for FY01.

Recreational activities available at the Dog Canyon Tract are limited at present. A trail or system of trails connecting the main area of the park with the tract is discussed in Trails, Section E. With the expected expansion of interpretation and events at the ranch house, measures must be taken to accommodate the needs of the visitor. There currently is not a restroom facility there suitable for public use. The installation of a new vault toilet near the parking area there will serve visitor needs for the foreseeable future. The installation of this toilet is planned for FY03 and will cost \$25,000 in CIP funds.

Administration/Staff Facilities. There are three administrative and staff facilities at OLMSP. The park office/visitor center and maintenance shop/yard are considered the administrative hub of the park and are located in the main area near the mouth of Dog Canyon. The park staff residence is located on the Dog Canyon Tract near the Oliver Lee Ranch House.

The office space available at present seems adequate, however SPD's Planning Bureau may come up with an office use plan to take full advantage of the space available. A room in the office was recently converted for the purpose of storage and curation of artifacts. Several maintenance projects and items are needed at the park's operational facility. The twenty-year-old leaking and warped roof on the Visitor Center needs to be replaced. This project is expected to cost \$10,000 in CIP funds and is planned for FY03. Some miscellaneous projects planned for the park's

administrative facility include painting the interior of the visitor center, covering the shop ceiling with wall board and painting it. These jobs will be completed by park staff as routine maintenance. The shop maintenance road and yard are a dirt and gravel combination that is eroding and requires periodic maintenance. The paving of these areas would stop erosion and minimize maintenance. This project is included in the repaving of all park roads project mentioned in Section G. These repairs and improvements will insure that this facility remains in a safe and functional condition for years to come.

In 1997, the Park Manager residence adjacent to the Visitor Center was converted to an office. Later that year, a new mobile home was placed on the Dog Canyon Tract, 500 feet south of the Oliver Lee Ranch House (See maps Appendix A). A permit for the residence was obtained from White Sands National Monument (WSNM), who owned the tract at the time. The approved park project request for the residence and yard included: a perimeter chain link fence, front and rear porches, a vehicle parking canopy and a xeric landscape plan. Both the park project request and WSNM permit required the residence and subsequent structures to have a corrugated metal roof and to be stuccoed a similar color to the Oliver Lee Ranch House in order to maintain a compatible viewshed. Several of these items have been completed and others are pending. One staff residence in the park is adequate at this time. Additional landscaping, an irrigation system, storage shed, walkways and a gravel driveway are planned for the yard. Any improvements to the yard will take into consideration the impact on the view shed from the ranch house. The residence and yard are in excellent condition.

Signage. There are currently informational signs at OLMSP found along the park's roadways, in the campground and on buildings like the comfort station. These signs are made of wood and are painted dark brown with white lettering. A new uniform system is needed both to provide updated and more accurate information and for a more aesthetically appealing look that is easier to maintain. The proposed new signs will be made of wood and finished with a protectant that will eliminate painting. This will be done in FY01 and will cost \$500 in AOB funds. The park's interpretive signs are located outside the Visitor Center, on the interpretive trail and on the ranch house grounds interpretive trail. These signs are made of anodized aluminum and tell about the park's natural and cultural history. The signs at the ranch house are in good condition. The interpretive trail signs are due to be replaced and expanded upon. The result will give the park visitor a variety of information about the park and its history.

F. EQUIPMENT

Communications. The park's communications system is comprised of a public payphone, and an office telephone, fax machine, radios and a computer. The public pay phone is located outside the park's Visitors Center and is lighted and available 24 hours a day, seven days a week.

Park personnel are equipped with standard VHF radio communication equipment, which includes a base station, four hand-held radios with SPD frequency and radios in the park's two pick-up trucks, which also have the Otero County Sheriff's office and State Police frequencies. Three of the hand-held radios are available for staff use and one is assigned to the campground host. The

communications equipment at the park would be adequate with the addition of one more hand-held radio.

A computer/fax line was installed in May 1998 and allows for communication with the Santa Fe office, other state parks, and the community at large via E-mail. The park also has access to the Internet by dialing a local provider number in Alamogordo. The fax machine allows for transmitting information to any other entity with fax capabilities.

There is no phone line service at the park residence. The park manager has a personal cellular phone for private use and for call-outs to the park. Because of the geographic location, cellular phone signal reliability is, at best, marginal. In early 1999, a line engineer from US West Communications was asked to investigate the possibility of extending phone line service to the residence. The engineer suggested the line servicing the main area of the park be spliced at the intersection of Dog Canyon Road and Old El Paso Road. An underground line should then be laid along Old El Paso Road in a southeasterly direction to intersect with the Holloman Air Force Base (HAFB) well and line maintenance road. The line would follow the Holloman road south until parallel to the park residence, then go east through park property to the residence. If US West were to do the entire job, it would seek the easements required from the BLM, HOFB, Mr. Fairchild and the NMSLO. If SPD were to do the trenching, it would have to secure the easements. In either case, US West would run the phone line. FY03 is targeted for phone line installation.

The project will be funded by the CIP budget and will cost \$20,000. Perhaps the development of newer technology will eliminate the need for line service.

Field Equipment. Appendix E contains a list of field equipment in the park's inventory.

Office Equipment. A list of field equipment on the park's inventory is contained in Appendix E. A 32" video monitor or a video projector is needed for the presentation of educational and interpretive programs in the visitor center theater. This will cost \$4,000 from CIP/AOB/OG in FY04.

F. TRANSPORTATION and ACCESS

Roads. While the park roads in most cases are adequate to allow visitors to get to and from campgrounds and other facilities, the roads in general are in need of paving and resurfacing. The paved roads in the park, including parking areas, are approaching 20 years old. Numerous cracks and edge crumbling are occurring. The park is responsible for maintenance of the 1.5 mile long gravel road from the campground to the ranch house. Since the availability of heavy equipment is limited, maintenance and repair is usually accomplished by using a Bobcat tractor, pick-up trucks, hand tools and a road drag. To correct erosion and reduce maintenance, the gravel yard and shop road needs to be paved.

The new vault toilet parking area needs to be paved and a walk added for ADA accessibility. This will cost \$1,000 in CIP funds and is planned for FY02. An ADA compliant walk now connects the vault toilet to site 36, which will become an ADA site in the same year. On the north side of the park entrance/exit gate, a bypass with a tire ripper over an additional cattle guard is needed to allow after-hours exit, while still providing security to park visitors. A pedestrian walkthrough on the south side will be included. This entrance/exit improvement is estimated to cost \$5,000 in CIP monies and is planned for FY03. The modification of the park's dump station to allow for two-way use will require widening the road and repaving the area and is also planned for FY03. The modification will be funded by the CIP budget and will cost \$2,500.

As part of recent ADA renovations to the comfort station and Visitor Center restroom, the handicapped parking spaces to those facilities were redesigned for compliance. The exact methods to be used to refurbish the park's remaining paved roads and parking areas are not yet identified. An assessment by road professionals is necessary to determine the best means of repair. \$50,000 in CIP and possibly OG funds is requested for FY02 for this project, which should include paving of the maintenance yard and road.

Trails. There are three existing trails at OLMSP: the Dog Canyon Recreation Trail (USFS 106), the interpretive trail at the mouth of Dog Canyon and the Ranch House Grounds Interpretive Trail. The trails are popular and require intensive maintenance. They vary in difficulty and length.

The Dog Canyon Recreation Trail begins at the Visitor Center and ends at USFS road 90B, a distance of 5.5 miles and a climb of 3,144 feet in elevation. It is a rigorous trail and takes the hiker from the desert environment to the forested Joplin Ridge. The first four-tenths of a mile is in the park, and park staff is responsible for the maintenance of this portion. The remainder of the trail is in the Lincoln National Forest, which is responsible for that maintenance. Because of the challenging terrain, heavy use and park staff limitations, maintenance of the trail is difficult and is possible with the use of hand tools only.

The interpretive trail begins at the Visitor Center and enters Dog Canyon. A 360-foot long boardwalk spans and follows the Dog Canyon Stream. This allows the visitor to experience the unique riparian environment without significant impact to the fragile area. The lower part of the trail then heads downstream, out of the canyon to Frenchy's Cabin and back to the Visitor Center. The length of this loop trail is .6 miles, and it is of low to medium difficulty. The trail contains many interpretive markers that highlight the natural and man-made features of the canyon. The presence of water, shade trees, tables, benches and beautiful scenery attracts many visitors to this trail. The park has secured two trail grants (OG). The grants are being used for repair and renovation of the trail and its facilities, as well as for rerouting the trail away from areas of severe erosion and the addition of new facilities. All documentation pertaining to the grants and the project are on file in the park office. The park manager is responsible for the project and administration of the grants.

The Ranch House Grounds Interpretive Trail was completed in 1998. It is a short and well-defined trail that connects the various outdoor features of the property. The trail also lessens visitor impact on archaeological sites by routing foot traffic away from these resources. Several

interpretive signs on the trail highlight turn-of-the century ranch life in Southern New Mexico to the visitor, and are at present adequate. The trail is in excellent condition.

A trail or system of trails connecting the main area of the park with the Dog Canyon Tract, which may accommodate bicycling, is planned for FY05. It is estimated that \$10,000 in OG funding will be needed for these additions to the recreational opportunities at OLMSP.

H. UTILITIES

All utilities including those for water, wastewater, energy systems and solid waste will be monitored by park staff to ensure their capacities are adequate, especially given projected increases in visitation in the coming years.

Water. One well located near the visitor center provides water for the main park. A 7.5 H.P. submersible sets at 425 feet in the well with the total depth of the well at 500 feet. The well was upgraded in 1995 due to the failure of the pump. The water is pumped to a centrifugal separator and bag filter, then to a series of pressure tanks and to the distribution system.

The average yearly production of the main area well is 1.0611 million gallons. The well is bacteriologically tested on a quarterly basis. The distribution system was installed during the park construction phase and new taps were installed when electrical service was later extended to sites 20 through 26. The water system does not have any main line cut-off valves for isolation of the loops in the campground, necessitating the shut down of the whole park for repairs. Installation of cut off valves and line drains should be a priority and should take place in FY02 and be funded by \$3,000 in CIP monies. Installation of individual curb-stops on each hydrant will be installed by park staff to enable repairs without shutting the whole system down.

Water for the Dog Canyon Tract is provided by a 1.5 horsepower submersible pump set at 160 feet in a well with a total depth of 190 feet. The well is located near the Oliver Lee Ranch House. The average production of this well is 550,000 gallon per year. The original well was drilled in 1986 and was reworked in 1996. The system consists of the well, a submersible pump, two pressure tanks and approximately 600 feet of service line. In 1998 chemical testing was done on this well; no parameters appeared to be above maximum contaminant level (MCL), although levels of iron and magnesium sulfate are quite high. Bacteriological testing has not been done on this well, but probably should be to ensure the potability of this well. This well provides water for the Ranch House and the staff residence. The system does have appropriate isolation valves but does not have back-flow prevention on the Ranch House irrigation system, which should be installed to prevent back flow contamination.

Wastewater. The waste water system in the main park consists of three separate septic tanks with drainage beds. There is one each for the Visitor's Center, the dump station and the comfort station. The vault toilet has its own holding tank, which is pumped out by a contractor as needed.

The Dog Canyon Tract has two septic systems at the staff residence and the Ranch House. These systems are under the management of the Regional Plant Operations Specialist. They are functioning properly and appear to be adequate.

Energy & Water Conservation. All new facilities designs will employ energy conservation principles. Structures will be well insulated, have energy-efficient lighting and fixtures, controllable thermostats, double-paned windows and have sensors to control lighting during non-peak hours. All plumbing fixtures will be water conserving with low volume valves. All areas and buildings will continue to be open during the regular hours. The staff will be periodically trained regarding energy conservation practices, and professional energy conservation specialists will conduct inspections of the facilities and make recommendations for improvement. All buildings have programmable heating thermostats.

Electricity. All the electrical service at Oliver Lee Memorial State Park is provided by Otero County Electric Cooperative (OCEC). A 14,400-volt service supplies the main park. The power lines enter the park on above ground poles and go underground at the power consumption meter near the park entrance. The underground power line runs parallel to the entrance road to the pay station area. After leaving the pay station area the power lines go to a transformer at the park comfort station. The power lines to all of the electrical sites come from this transformer, which also supplies power to the comfort station. The main power line runs from the comfort station to the park's main well house transformer. Finally the power line runs under the Visitor Center parking lot to a transformer behind it, supplying power to the center the office and maintenance shop area.

The underground service line has shorted at least five times since the opening of the park – twice in 1999. A break in service due to an underground short is costly, an inconvenience to our visitors, and it may potentially create health risks. Each immediate-need repair to a short in the line made by a private contractor costs SPD a minimum of \$1,000. A local contractor has indicated that the underground well was not laid in conduit as the reason for the frequent shorts. This contractor proposed that, at minimum, half the main service lines be re-laid in conduit. SPD's construction supervisor recommended that the entire main service be re-laid in conduit. At least \$75,000 in CIP funds will be needed in FY02 to replace the line.

The power line at the Dog Canyon Tract, which supplies electricity to the staff residence and the Oliver Lee Ranch House is also supplied by OCEC. The line is above ground for approximately ¼ mile to the meter pole where it goes underground to the staff residence and the Oliver Lee Ranch House. A 14,400-volt service is provided to the Dog Canyon Tract, and the park residence and Oliver Lee Ranch House each have their own meters. On January 1, 1999 the Park Manager, who resides at the staff residence, began to pay for utilities that include electricity and propane.

Propane. A private vendor currently provides propane to OLMSP on contract. This contract is renewed annually. The park has three 500-gallon tanks and one 1,000-gallon tank. These will be adequate for this planning period. The same vendor also provides mechanical service to the propane systems on the park's two pick-up trucks and the heating systems via the same contract.

Solid Waste. A private company is contracted to remove solid waste from the park on a regular basis. There are two three-cubic-yard dumpsters in the campground which service the entire park. Numerous trash receptacles are located throughout the park and staff empties them and disposes of the refuse in the dumpsters. The dumpsters are emptied according to a schedule established by the Park Manager. The types and amounts of trash containers in the park and the

schedule of waste removals are adequate at this time.

V. BUDGET and STAFFING

A. CURRENT BUDGET

The table below lists the total expenditures at OLMSP for FY95 – FY99. The amounts shown below were allocated to the park by SPD. These expenditures include the annual operating park budget and employee salaries and benefits.

**TABLE 7
OLMSP EXPENDITURES**

Fiscal Year	Expenditures
99	\$155,469
98	\$150,852
97	\$124,607
96	\$162,679
95	\$120,677
Average	\$142,857

B. STAFFING

Staffing. The park is currently staffed with three full-time employees (FTE): a Park Manager and two Park Ranger II's. In addition, a seasonal laborer has been assigned to the park almost year-round for the past several years. There were five FTE's assigned at OLMSP at it's establishment. Since then two of these positions were transferred to other parks. A return to original staffing levels should be made to insure that a high quality of recreational experience opportunity is maintained for the inevitable growth in visitation. Also, more employees will be needed to maintain expanding park facilities and to staff expanded interpretive programs. At minimum, the addition of one Ranger I position is needed at OLMSP.

Volunteers and Other Groups. Volunteers are essential to the successful operation of the park. At any one time, they comprise at least half of the park's total work force. There are two full hook-up sites in the campground designated for volunteers. One site is reserved for a campground host, and the other for a park aide. Several volunteers from the local community staff the visitor center providing interpretive services and help out in a variety of ways. OLMSP has a Memorandum of Understanding (MOU) with the Retired Senior Volunteer Program (RSVP) in Alamogordo, and many of the park's volunteers are recruited and hired through RSVP. Some volunteers at OLMSP also help the park staff with construction and maintenance projects. Others are developing and will assist with the implementation of living history interpretation at the Oliver Lee Ranch House. Recruitment, hiring and training of all volunteers is done in coordination with the Region IV Volunteer Coordinator and the SPD Volunteer Coordinator in Santa Fe. The coordinators are also assisting in expansion of the volunteer program at OLMSP.

The New Mexico Volunteers for the Outdoors (NMVFO) are a special volunteer group that has worked on many projects at several New Mexico State Parks, including two projects at OLMSP. In the spring of 1998 NMVFO made numerous improvements to the park's Interpretive Trail. In the fall of 1999 the first half-mile of the Dog Canyon Recreation Trail that is contained in the park was repaired by the NMVFO. OLMSP may request the services of NMVFO, or other groups in the future to further benefit from the efforts of these talented and productive groups.

There is currently not an active support group for OLMSP. The development of a Friends Group is considered a vital component to the overall success of the park. A group known as The Oliver Lee Historical Society was once active and in fact put on an event at the ranch house in 1992. This group was comprised of Lee family members and local citizens and has become inactive. The Park Manager feels there is a need for a Friends Group that will assist with park educational and interpretive programs, develop and put on park events, raise funds for events and programs and generally assist with various aspects of operation of the park. A group should be active by the end of the calendar year 2000.

APPENDIX A: Maps of Region and OLMSP

APPENDIX B: Legal Descriptions

The complete legal description for the original 200 acres of OLMSP that is referred to in this Plan as the Main Area is as follows:

Township 18 S, Range 10 E, Section 16, NE1/4, E1/2 E1/2 SE1/4

The complete legal description for the 440 acres of the Dog Canyon Tract is as follows:

Township 18 S., Range 10 E, Section 21, S1/2 NW1/4, SW1/4, and W1/2SE1/4; Section 28, NW1/4NE1/4, and N1/2NW1/4.

APPENDIX C-1: Staffing

Park Manager. Supervises all park operations, plans and schedules projects. Is primarily responsible for the park operating budget and purchasing. Schedules staff to provide visitor services, maintenance, law enforcement, administrative functions, and serves as the primary liaison to other agencies and to the local community.

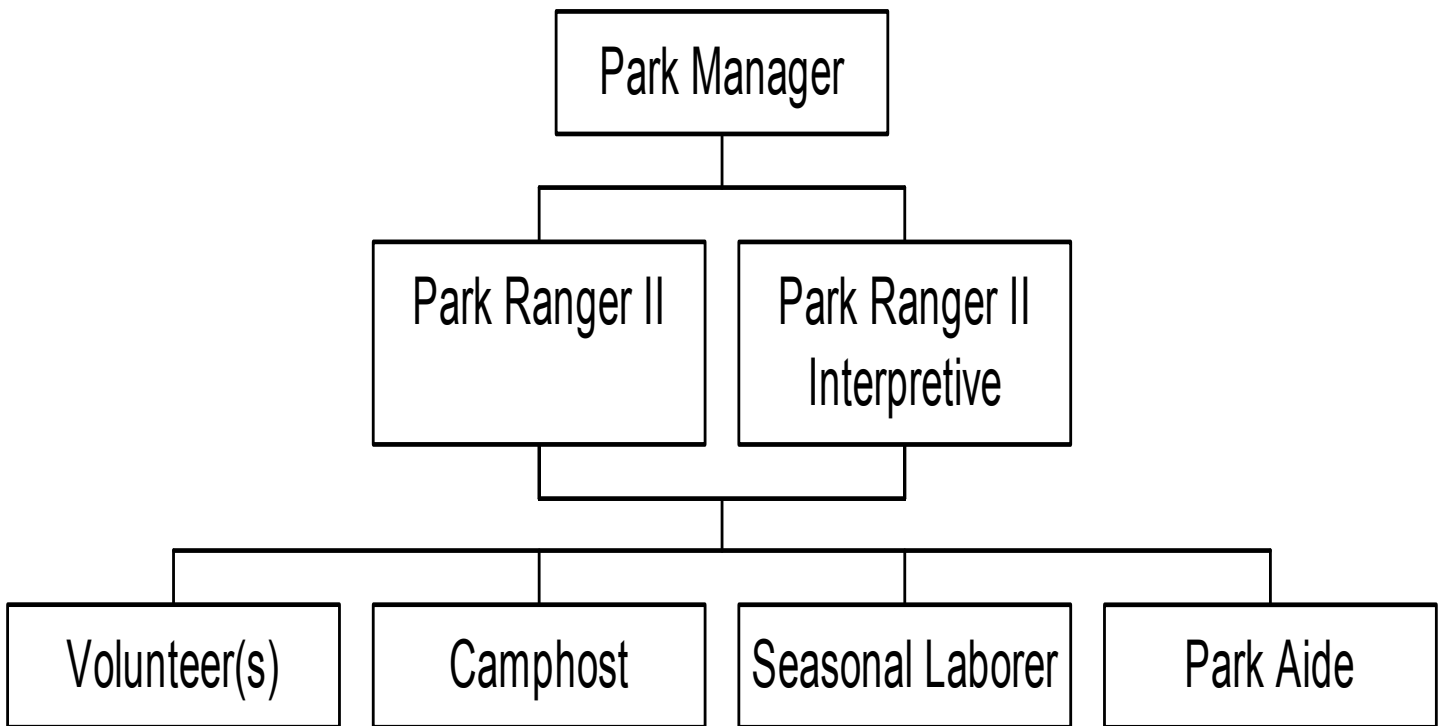
Park Ranger II. Serves as Assistant Park Manager. Has primary responsibility to assist in operation of the park, and to manage the park in the absence of the Park Manager. Provides the primary direction for Seasonals and Volunteers. This position also performs administrative functions and law enforcement as needed.

Park Ranger II – Interpretive. Is primarily responsible for development and implementation of interpretive programming and events at the park. Trains and oversees volunteers that provide interpretive services to park visitors. Is responsible for community outreach programs and events that educate the public about natural and cultural resources, and park-related issues. Assists other parks within the region in development of interpretive programs. Provides some assistance to park staff in the areas of administration, maintenance and construction as needed.

Volunteers. Volunteers are utilized in the park throughout the year. *Campground hosts* reside in the park and assist visitors, keep a clean and orderly campground, do a daily fee compliance check, and help out in the park visitor center. A resident *Park Aide* position is filled at least half the year. This position provides the primary volunteer staffing of the visitor center. In addition, the Park Aide is a back-up Camp host and helps out in many other ways. *Other Volunteers* (usually from Alamogordo RSVP) assist with operation of the park in a variety of ways. These volunteers work in the visitor center, provide interpretive services, help with construction projects, or do just about anything else that the park requires.

APPENDIX C-2: Staff Organization Chart

Oliver Lee Memorial State Park
Organization Chart



APPENDIX D-1: Facilities List

Facility	Description of facility	Location of facility
Campground	Total of 44 developed back-in sites. 18 sites have electricity and water hookups. All 44 sites have picnic table and pedestal grill or fire ring. 10 sites have shelters. Two volunteer sites have sewer hook-ups.	Located in main area of park.
Visitor Center	Contains interpretive exhibits of cultural, historical and natural resources of Dog Canyon. Has an enclosed theater where slides and videos are viewed, or presentations given. ADA-compliant parking, walkway and restroom. Park staff and volunteers are available to assist visitors there.	Part of park administrative building, located in main area of park.
Office/ shop	Contains park offices and employee facilities. Shop has park maintenance and storage facilities. Yard and parking canopy are outside.	Part of park administrative building, located in main area of park.
Comfort station	ADA-compliant facility with showers. Outfitted with water/energy efficient fixtures, radiant heated floor.	Centrally located in campground between sites 22 and 24.
Vault toilet	Modern holding tank toilet facility.	Next to site 36, on loop B in the campground.
Dog Canyon Recreation Trail	This challenging trail is also known as Forest Trail #106. Starts in the park and extends 5.5 miles up into the Lincoln National Forest east of the park. Climbs 3,100 feet in elevation.	The trailhead is in OLMSP and is located outside of the Visitor Center.
Interpretive Trail	Loop trail is .6 miles long. Goes in and out of Dog Canyon. Streamside is scenic and good wildlife viewing area. Contains interpretive signs that highlight many natural and cultural features, and a 360' long boardwalk.	Begins at the visitors center and enters Dog Canyon. Ascends out of the canyon at Frenchy's Cabin and returns to Visitor Center.
Ranch House Interpretive Trail	Short loop trail with interpretive markers that detail the cultural and historic features of the grounds.	Around the Oliver Lee Ranch House located on the Dog Canyon Tract.

APPENDIX D-2: Facilities List Continued

Other Park Facilities

- 1 Dump station
- 1 Self-pay station with solar powered night lighting
- 2 Wells and well houses (Main Area and Dog Canyon Tract)
- 1 Staff residence and associated grounds

APPENDIX E-1: Equipment List – Communications

COMMUNICATIONS EQUIPMENT

<u>Quantity</u>	<u>Item</u>	<u>Make/Model/Description</u>
4	Hand-held radios	Midland # 70-166-166B
4	Chargers (for radios)	Midland # 70-C66
1	Radio base station	RCA # BBA33CB11
2	Mobile radios	Midland #70-1395B & #70-1495B

APPENDIX E-2: Equipment List – Field

FIELD EQUIPMENT (OVER \$500)

<u>Quantity</u>	<u>Item</u>	<u>Make/Model/Description</u>
1	Tractor	Bobcat # 773, no attachments
1	Dump trailer	Big-Tex # 10LP
1	Utility trailer	Atwood # UT 5X121982
1	Mower, propelled	Sarlo # 524SPI/C
1	Mower, propelled	John Deere # Model 14SC
1	Mower, push	Murray # KM10089-20203X12
1	String trimmer	Stihl # FS106

FIELD EQUIPMENT (UNDER \$500)

<u>Quantity</u>	<u>Item</u>	<u>Make/Model/Description</u>
1	Cement mixer	Red Lion # RLMG
1	Portable generator	DeVilbiss # GB4000-24000 Watt
1	Chainsaw	Poulan # 285 Pro
1	Pressure washer	Craftsman # 580.762600, 7hp, 2600 PSI
1	Portable air compressor	Speedaire # 2Z499C

APPENDIX E-3: Equipment List – Office Equipment

OFFICE EQUIPMENT (OVER \$500)

<u>Quantity</u>	<u>Item</u>	<u>Make/Model/Description</u>
1	Computer	DTK # QUIN-55D
1	Monitor	DTK # CMD-1536
1	Printer	Hewlett Packard # Laser Jet 5L
1	Fax machine	Sharp # FO-2600
1	Copy machine	Konica # 1290 RE

OFFICE EQUIPMENT (UNDER \$500)

<u>Quantity</u>	<u>Item</u>	<u>Make/Model/Description</u>
1	TV/VCR	Panasonic # AG-520A, 19" screen
1	Slide projector	Telex Caramate, with audio cassette player
1	Calculator, desktop	Sharp # COMPET SC-1152H,
1	Calculator, desktop	Texas Instruments TI-5045SV
1	Answering machine	Panasonic # AUTO-LOGIC

APPENDIX E-4: Equipment List – Vehicles

VEHICLES

<u>Quantity</u>	<u>Item</u>	<u>Make/Model/Description</u>
1	Pickup truck	Ford # F250, 1995 ¾ ton, 4X4 with L.E. equipment
1	Pickup truck	Ford # F150, 1996 ½ ton, 4X2
1	All terrain vehicle (ATV)	Polaris # W958740, 1995 6X6 400L

Appendix F: Cultural Resource Protection Laws

The following cultural resource protection laws are applicable to OLMSP, which is owned by the State Park Division of the Energy, Minerals and Natural Resources Department. Each law has a direct bearing on the management of the park. Park personnel should reference the Cultural Resources Guidelines for New Mexico State Parks for more detail regarding the documentation, protection, and preservation of cultural resources.

Federal

Native American Grave Protection and Repatriation Act of 1990 (25 U.S.C. 3001). This act protects Native American human remains, funerary objects, sacred objects and objects of cultural patrimony. It prohibits the sale, purchase or use or transport for sale or profit, the human remains of a Native American. The law outlines the procedures in the event of an inadvertent discovery of a Native American burial as well as the relinquishment of control of such items to the appropriate Native American group.

National Register of Historic Places, 36 C.F.R., Part 60. This is the official federal list of districts, sites, buildings, structures and objects significant in American history, architecture, archeology, engineering, and culture. These properties must have historic significance and integrity and must meet at least one of the following criteria: association with significant events; association with important persons; distinctive design or physical characteristics; or potential to yield information important in history or prehistory.

State

New Mexico Cultural Properties Act (NMSA 1978, § 18-6-1 to 18-6-17). This act recognizes that the historical and cultural heritage of the state as one of the state's most valued and important assets. It indicates that the neglect, desecration and destruction of historical and cultural sites, structures, places and objects result in an irreplaceable loss to the public. It establishes the New Mexico Historic Preservation Division (HPD) to maintain the New Mexico Register of Cultural Properties (similar to the National Register) and to review of state projects to determine effect upon significant historic properties. This law prohibits unauthorized excavation, injury or damage to cultural properties located on state land. It requires excavation and burial permits and assesses criminal and/or civil penalties for unlawful excavation of cultural properties or burials. Finally, this law requires that site location remain confidential.

New Mexico Prehistoric and Historic Sites Preservation Act (NMSA 1978, § 18-8-1 to 18-8-8). This law states that no public funds of the state shall be spent on any program that requires the use of any portion of land from a significant prehistoric or historic site unless there is no feasible and prudent alternative and unless the project includes all possible planning to preserve and protect the cultural property.

New Mexico Cultural Properties Protection Act (NMSA 1978, § 18-16A-1 to 18-6A-6). This law

requires state agencies to establish a system of professional surveys of cultural properties on state lands. State agencies are required to cooperate with the Historic Preservation Division to ensure that cultural properties are not inadvertently damaged or destroyed.

APPENDIX G: Current Park Brochure